

What Is Claimed Is:

1. An apparatus for peeling the outer skins of garlic using a wet process, comprising:
 - 5 a garlic bulb splitting part for injecting high-pressure water to garlic bulbs to split the garlic bulbs into individual garlic cloves;
 - 10 a garlic clove peeling part having at least three garlic clove peelers arranged one after another and a conveyor provided between adjacent garlic clove peelers for separating and conveying the outer skins and the garlic meats containing water therein discharged from each garlic clove peeler, the garlic clove peeling part adapted to inject high-pressure water to the split garlic cloves when the split
 - 15 garlic cloves are provided from the garlic bulb splitting part to thereby peel the outer skins of the garlic cloves;
 - 20 a dry part for blowing air to the garlic meats by means of an air blower such that the garlic meats are fully dried, while conveying the garlic meats from the garlic clove peeling part through a conveyor;
 - 25 an outer skin separating part provided between the garlic bulb splitting part and a first garlic clove peeler and between a final garlic clove peeler and the dry part, respectively, for conveying the garlic cloves or the garlic meats from the garlic bulb splitting part or the garlic clove peeling part such that the garlic meats are dropped to first and second water paths by the control of an installation angle thereof and the outer skins are caught by first and second meshes conveyors;
 - 30 an outer skin discharging part provided with a discharging chamber having a gutter communicating with the lower portions of the first and second meshes conveyors and with the lower portion of each conveyor of the garlic clove

peeling part, a perforated plate communicating with the gutter, and a brush conveyor for sweeping and discharging the water and outer skins dropped through the gutter flowing into the discharging chamber;

- 5 a water circulating part having a first settling tank for pumping water to each garlic clove peeler, a second settling tank placed to gather water filtered through the perforated plate at the lower portion of the discharging chamber, pumping the water to the first water path of the
- 10 first meshes conveyor and the first settling tank, and a third settling tank placed at the lower portion of the dry part, for supplying water to the second water path of the second meshes conveyor and for circulating the water gathering again through the dry part; and
- 15 a water discharging tank having a fourth settling tank and a filtering tank, the filtering tank having activated charcoal filled therein and filtering meshes provided at the upper portion thereof, for purifying the water flowing from the fourth settling tank by the use of the activated charcoal
- 20 when the water is pumped from the first settling tank to discharge the purified water.

- 25 2. The apparatus according to claim 1, wherein the garlic bulb splitting part comprises: a garlic bulb putting hopper into which garlic bulbs are thrown; a cylindrical garlic bulb putting tube into which the garlic bulbs are put, extended downwardly from the garlic bulb putting hopper; a group of multistage nozzles spaced equally along a circumferential direction from the middle portion to the lower portion of the garlic bulb putting tube; a water
- 30 storing tank placed near the garlic bulb putting tube for supplying water to the group of multistage nozzles; a conveying passage communicating in a horizontal direction with the lower end of the garlic bulb putting tube; and a discharging outlet communicating slantly in an upward

direction with the conveying passage, wherein the group of multistage nozzles have reference nozzles that are positioned in a vertical direction to the garlic bulb putting tube at the lower portion of the garlic bulb putting tube, upper 5 nozzles that are positioned at the upper portion with respect to the reference nozzles, spaced at intervals that become large by stages and slanted at angles that become large by stages toward the lower portion as they reach the upper portion, and lower nozzles that are positioned at the lower 10 portion with respect to the reference nozzles, spaced at intervals that become large by stages and slanted at angles that become large by stages toward the upper portion as they reach the lower portion, the reference nozzles being formed in such a manner that the unit nozzles aligned along the 15 circumferential direction are directed to the middle portion of the garlic bulb putting tube, the unit nozzles of the upper and lower nozzles being formed in turn in such a manner as to be directed to the left or right with respect to the middle portion of the garlic bulb putting tube.

20 3. The apparatus according to claim 1, wherein each of the garlic clove peelers in the garlic clove peeling part comprises: a garlic clove putting hopper into which garlic cloves are thrown; a cylindrical garlic clove putting tube into which the garlic cloves are put, extended downwardly 25 from the garlic clove putting hopper; a group of multistage nozzles spaced equally along a circumferential direction from the middle portion to the lower portion of the garlic clove putting tube; a water storing tank placed near the garlic clove putting tube for supplying water to the group of 30 multistage nozzles; a conveying passage communicating in a horizontal direction with the lower end of the garlic clove putting tube; and a discharging outlet communicating slantly in an upward direction with the conveying passage, wherein the group of multistage nozzles are provided with at least

two sets of peeling nozzles each having the three-stage nozzles starting at the lower portion thereof, each set of peeling nozzles having intermediate nozzles positioned in a vertical direction to the garlic clove putting tube, upper 5 nozzles positioned slantly in a downward direction, and lower nozzles positioned slantly in an upward direction in such a manner as to be symmetrical to the upper nozzles, the upper nozzles at the upper portion with respect to the sets of peeling nozzles being positioned slantly downwardly at a 10 larger angle than the slanted angle of the upper or lower nozzles of the sets of peeling nozzles, the intermediate nozzles of each of the two sets of peeling nozzles being formed in such a manner that the unit nozzles aligned along the circumferential direction are directed to the middle 15 portion of the garlic clove putting tube, the unit nozzles of the upper and lower nozzles being formed in turn in such a manner as to be directed to the left or right with respect to the middle portion of the garlic clove putting tube.

4. The apparatus according to claim 2 or 3, wherein the 20 garlic bulb or garlic clove putting tube has one or two forced discharging nozzles on the upper portion thereof, for forcibly discharging the garlic bulbs or garlic cloves in a downward direction, each of the one or two forced discharging nozzles having a larger downward inclination angle than the 25 group of nozzles, slanted in a left or right direction, and has a discharging outlet provided with a sliding opening/closing door for adjusting the time during which the garlic bulbs or garlic cloves stay in the garlic bulb or garlic clove putting tube.

30 5. The apparatus according to claim 4, wherein the discharging outlet has a guide for guiding the sliding direction of the opening/closing door and a fixing stand disposed at the outside of the opening/closing door, for fixing the opening/closing door to the guide, the

opening/closing door having a packing plate disposed on the contact portion with the guide, for tightly contacting the guide and having a handle grip disposed at the top end thereof.

5 6. The apparatus according to claim 4, wherein a water storing tank has at least one or more sets of processing nozzles having downward, horizontal and upward injection directions in the interior thereof, pressurizing nozzles having only a downward injection direction therein, and a
10 compartment laying between the sets of processing nozzles and the pressurizing nozzles such that the upper portion of the compartment forms a pressurizing nozzle pressurizing chamber and the lower portion thereof forms a processing nozzle pressurizing chamber, each of the pressurizing chambers being
15 connected with first and second water supply pipes each connected to different pumps, for supplying water in different pressures to the pressurizing nozzles and the processing nozzles.

7. The apparatus according to claim 1, wherein the dry
20 part comprises a garlic meat discharging part at the rear thereof, the garlic meat discharging part having a post-processing conveyor where the garlic cloves that have not been peeled off, the outer skins, and the garlic stalks are separated manually, a washing tank, a dewatering conveyor for
25 removing the water remaining on the garlic meats by use of air blowers, and a size sorter on which the garlic meats are sorted by sizes as it is vibrated.

8. The apparatus according to claim 1, wherein the filtering meshes of the water discharging tank have a W-shaped section portion such that water flows to the central portion thereof.
30

9. The apparatus according to claim 1, wherein the dry part and the one side of the discharging chamber are connected via a predetermined pipe, such that the outer skins

blowing while dried in the dry part are sent to the discharging chamber.